

REMARKS

Claims 1-8 are active in this application.

Applicants wish to thank Examiner Bernsteyn for the helpful and courteous discussion with Applicants' Representative on June 13, 2007. During this discussion it was noted that Chiefair et al (WO 99/31144) is discussed in the specification at page 2, lines 23-38. The claims of the present invention require synthesizing "in situ" of the hydrosoluble transfer agent. The phrase "in situ" is defined at page 5, lines 20-23 of the specification. None of Chiefair et al and Egraz et al disclose or suggest synthesizing "in situ" of the hydrosoluble transfer agent.

Applicants respectfully request reconsideration of the application, in view of the following remarks.

The present invention as set forth in **Claim 1** relates to a process for controlled radical homopolymerisation, in an aqueous solution, of acrylic acid and its salts, or of copolymerisation, in aqueous solution, of acrylic acid with one or more hydrosoluble monomers, wherein said process is in batch or semi-batch mode, and wherein said process comprises two stages, the first of which is synthesizing "in situ" an hydrosoluble transfer agent used in the second stage of polymerisation.

In contrast, none of Chiefair et al and Egraz et al disclose or suggest synthesizing "in situ" of the hydrosoluble transfer agent.

The phrase "in situ" is defined at page 5, lines 20-23 of the specification: "This "in situ" synthesis of the catalyser means that it does not have to be handled as such, even if it can be advantageous to remove the residue from the synthesis of the transfer agent which is potassium or sodium bromide."

Further, Chiefair et al (WO 99/31144) is discussed in the specification at page 2, lines 23-38: "Other documents (WO 99/31144; WO 00/75207; WO 01/27176; WO01/42312; WO

02/08307; WO 02/22688) require the use of a reactive medium for synthesis of the transfer agent other than water. These transfer agents synthesised in a solvent medium other than water do not allow acrylic acid to be polymerised in the same reactive medium as that which allowed synthesis of the transfer agent.”

In the Office Action, the Examiner refers to page 7 lines 23-25, page 26 lines 20-22, examples page 34-64 of Chiefair et al. However, those passages only mentions the batch and the semi batch modes of the process.

Further, contrary to the Examiner’s statement, the chain transfer agents of Chiefair et al are not water soluble.

Chiefair et al uses additional solvent (procedure I, example 1 : methanol - procedure I example 2 : dimethyl sulfoxide - etc...). Indeed, Chiefair et al need a solvent because the chain transfer agents of Chiefair et al are not water soluble.

Contrary to the Examiner’s statement, the chain transfer agents of Chiefair et al are not substantially identical to the claimed invention.

The chain transfer agents according to the present invention are hydrosoluble, and the chain transfer agents of Chiefair et al are not water soluble. One of the challenges of the present invention was to find a process (in situ synthesis of the chain transfer agent + synthesis of the final polymer) in aqueous solution: it was not obvious to find a chain transfer agent which was hydrosoluble on one hand, and being able to control the polymerization of acrylic acid in water on other hand.

Egraz et al was only cited to show polymerization of ethylenically unsaturated monomers in aqueous solution. Thus, Egraz et al does not cure the defects of Chiefair et al.

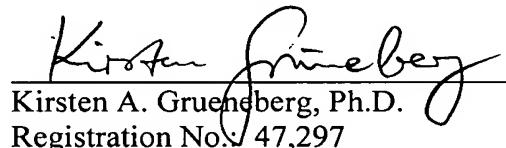
Therefore, the rejection of Claims 1-8 under 35 U.S.C. § 103(a) over Chiefair et al and Egraz et al is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

Application No. 10/522,340
Reply to Office Action of March 23, 2007

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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